

AMENDMENTS TO THE CLAIMS:

(1) Please cancel claims 1-13 without prejudice or disclaimer of the subject matter thereof.

(2) Please add new claims 14-33.

Listing of Claims:

Claims 1-13 (Canceled).

Claim 14 (New): A spray bar for applying fluids onto an adjacent surface, said spray bar comprising:

an inner tube having a pathway defined longitudinally therethrough adapted to receive a fluid, and at least one aperture through the wall of said inner tube and in communication with said pathway;

an outer tube adapted to receive said inner tube therein, said outer tube having at least one aperture through the wall of said outer tube arranged such that said inner tube aperture and said outer tube aperture can be caused to align;

at least one spray nozzle mountable on the outer wall of said outer tube in communication with said outer tube aperture; and

an actuator means arranged to cause said inner tube to move relative to said outer tube thereby causing said apertures in said inner and outer tubes to move into and out of alignment.

Claim 15 (New): The spray bar as set forth in claim 14, wherein said inner and outer tubes have multiple corresponding apertures spaced along their respective lengths, with a spray nozzle associated with each aperture in said outer tube.

Claim 16 (New): The spray bar as set forth in claim 15 further including a return pathway for fluid that does not pass out through said spray nozzles in use, enabling the fluid to circulate.

Claim 17 (New): The spray bar as set forth in claim 15, wherein said apertures in said outer tube are substantially the same size and shape, and are substantially equally spaced in a common axial plane along the length of said spray bar.

Claim 18 (New): The spray bar as set forth in claim 15, wherein said apertures are of various sizes and shapes.

Claim 19 (New): The spray bar as set forth in claim 18, wherein said apertures are located in different axial planes.

Claim 20 (New): The spray bar as set forth in claim 13 further comprising a rotor mounted on said inner tube at said aperture, said rotor having a port extending radially from said aperture to the outer circumference of said rotor, said rotor being rotationally fixed onto said inner tube.

Claim 21 (New): The spray bar as set forth in claim 20 further comprising an annular stator surrounded by said outer tube, said stator having an internal configuration substantially corresponding to the outer circumference of said rotor so as to receive and engage with said rotor, said stator having a port extending radially outwardly from its inner circumference to its outer circumference, said stator port being capable of alignment with said rotor port and with said outer tube aperture.

Claim 22 (New): A spray bar comprising:

- an inner tube through which a fluid can pass, said inner tube having at least one aperture in the wall thereof;

- a rotor mounted on said inner tube at said aperture, said rotor having a port extending radially from said aperture to the outer circumference of said rotor, said rotor being rotationally fixed onto said inner tube;

- an annular stator having an internal configuration substantially corresponding to the outer circumference of said rotor so as to receive and engage with said rotor, said stator having a port extending radially outwardly from its inner circumference to its outer circumference, said stator port being capable of alignment with said rotor port;

- an outer tube surrounding said stator and being fixed thereto coaxially with said inner tube, said outer tube having an aperture therethrough in alignment with said stator port;

- a spray nozzle attached to said outer tube in alignment with said stator port so that in use a fluid can pass therethrough; and

- an actuator to rotate said inner tube relative to said outer tube thereby moving said rotor port and said stator port into and out of alignment.

Claim 23 (New): The spray bar as set forth in claim 22, wherein there are multiple spray nozzles and corresponding rotor and stator ports disposed along the length of said spray bar.

Claim 24 (New): The spray bar as set forth in claim 23, wherein said rotors are keyed to said inner tube to prevent rotation, but are substantially free floating along the length of said inner tube, axially located via a spring means.

Claim 25 (New): The spray bar as set forth in claim 24, wherein the outer periphery of said rotor and the inner face of said stator are conical, and said spring means has a first end which engages said rotor and another end which engages said stator, thereby applying pressure to bias the circumferential face of said rotor and the inner face of said corresponding stator into engagement.

Claim 26 (New): The spray bar as set forth in claim 25, wherein said stators do not occupy the entire cross section of said outer tube, thereby providing a return flow path for unused fluid back along the length of said outer tube.

Claim 27 (New): The spray bar as set forth in claim 26, wherein one or more said stator and rotor combinations have two or more ports, either offset radially, or offset longitudinally.

Claim 28 (New): The spray bar as set forth in claim 27, wherein said spray bar has multiple said rotor and stator combinations, with some of said rotors having different port configurations than other said rotors, such that partial rotation of said inner tube can bring some of said rotor ports out of alignment with their said corresponding stator port, but other said rotor ports will remain in alignment with their said corresponding stator ports.

Claim 29 (New): The spray bar as set forth in claim 22, wherein said outer tube further comprising mounting holes through which fasteners are inserted to lock said stator into a fixed position with respect to said outer tube.

Claim 30 (New): A spray bar comprising:

an inner tube having a pathway defined longitudinally therethrough adapted to receive a fluid, and a plurality of apertures through the wall of said inner tube and in communication with said pathway;

a plurality of rotors mounted on said inner tube at said aperture, each of said rotors having a port extending radially from said corresponding aperture to the outer circumference of said rotor, said rotors being rotationally fixed onto said inner tube;

a keying arrangement adapted to prevent each of said rotors from rotating;

a spring means axially located to each of said rotors and adapted to allow said rotors float freely along the length of said inner tube;

a plurality of stators each having an internal configuration substantially corresponding to the outer circumference of said rotors so as to receive and engage with said rotors, said stators each having a port extending radially outwardly from its inner circumference to its outer circumference, said stator port being capable of alignment with said rotor port;

an outer tube surrounding said stator and being fixed thereto coaxially with said inner tube, said outer tube having an aperture therethrough in alignment with said stator port;

a plurality of spray nozzles attached to said outer tube in alignment with said stator ports so that in use a fluid can pass therethrough; and

an actuator to rotate said inner tube relative to said outer tube thereby moving said rotor port and said stator port into and out of alignment;

wherein the outer periphery of said rotors and the inner face of said stators are conical, and said spring means has a first end which engages said rotor and another end which engages said stator, thereby applying pressure to bias the circumferential face of said rotor and the inner face of said corresponding stator into engagement;

wherein said stators do not occupy the entire cross section of said outer tube, thereby providing a return flow path for unused fluid back along the length of said outer tube.

Claim 31 (New): The spray bar as set forth in claim 30, wherein one or more said stator and rotor combinations have two or more ports, either offset radially, or offset longitudinally.

Claim 32 (New): The spray bar as set forth in claim 31, wherein said spray bar has multiple said rotor and stator combinations, with some of said rotors having different port configurations than other said rotors, such that partial rotation of said inner tube

can bring some of said rotor ports out of alignment with their said corresponding stator port, but other said rotor ports will remain in alignment with their said corresponding stator ports.

Claim 33 (New): The spray bar as set forth in claim 32, wherein said outer tube further comprising mounting holes through which fasteners are inserted to lock said stator into a fixed position with respect to said outer tube.